I. Rejections Under 35 U.S.C. §112, First Paragraph

The Office has rejected claims 21 and 24-40 under 35 U.S.C. §112, first paragraph, for failing to enable one skilled in the art to determine which restriction fragments in other strains of HCMV encode pp28. The Office, citing *Pande,* has also stated that it appears that the HindIII R fragments of other HCMV strains is not the same as the HindIII R fragment disclosed by applicant and does not contain sequences encoding pp28, and that Applicant does not teach the location of the relevant sequences in any but the HCMV Ad169 strain and thus does not teach how to make and use the sequences as claimed. (Office Action, page 2-3.) Applicants respectfully traverse this rejection.

Applicants believe that given applicants' disclosure, one of ordinary skill in the art would be able to easily locate restriction fragments in other strains of HCMV which encode pp28. It is not necessary for Applicant to teach the location of the relevant sequence in every strain of HCMV. The specification shows that it is possible to screen an HCMV strain library with a cDNA clone and localize the pp28 coding sequence to a HCMV restriction fragment. (See specification at 2-3). In fact, *Pande* confirms that it was well within the skill of one of ordinary skill in the art to isolate restriction fragments in other strains of HCMV which encode pp28 through the use of cDNA clones. (See *Pande* at 762.) For these reasons, applicants respectfully submit that the specification

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provides an enabling disclosure that is commensurate in scope with the claimed subject matter. Accordingly, applicants request withdrawal of this 35 U.S.C. § 112, first paragraph, rejection.

II. Rejections Under 35 U.S.C. §112, Second Paragraph

The Office has rejected claims 19, 21, 24-36, 38, and 40 under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. (Office Action at page 3.) In particular, claim 19 was rejected for reciting "said DNA molecule does not comprise an entire HindIII fragment from the genome of human cytomegalovirus strain Ad169." The Office suggests that the metes and bounds of the claim are not entirely clear, "because it is not clear what the intended DNA does comprise and what the claim encompasses." Similarly, and as discussed in the interview of August 16, the Office asks whether this claim encompasses a "HindIII R fragment, minus one base pair."

Applicants answer this question affirmatively. Applicants intend to claim a DNA molecule encoding HCMV pp28, or antigenic portions thereof that elicit antibodies that immunologically bind to pp28, but applicants do not wish to claim an **entire** HindIII R fragment from HCMV strain Ad169. The claim as written would also cover all DNA molecules encoding HCMV pp28, or antigenic portions thereof that elicit antibodies that immunologically bind to pp28 from all HCMV strains. Thus, in response to the

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Examiner's question, the claim as written would thus cover, *inter alia,* said HindIII R fragment from HCMV strain Ad169 minus one base pair.

Similarly the Office suggests that the metes and bounds of claims 25-36 remain unclear for the same reason. Again, with regards to claim 25, it is applicants' intention that the claim as written would cover a DNA molecule encoding HCMV pp28, or antigenic portions thereof that elicit antibodies that immunologically bind to pp28, wherein said DNA molecule is a fragment of the HindIII fragment of HCMV that includes a DNA sequence which encodes pp28, or antigenic portions thereof that elicit antibodies that immunologically bind to pp28, but applicants do not wish to claim an **entire** HindIII R fragment from HCMV strain Ad169. The claim as written would thus cover *inter alia* said HindIII R fragment from HCMV strain Ad169 minus one base pair. With regards to claims 26-36, and as discussed in the interview of August 16, it is applicants intention to claim various length HindIII R fragment restriction fragments, as disclosed in figure 1, and fragments thereof, which encode pp28 or antigenic portions thereof that elicit antibodies that immunologically bind to pp28.

The Office has also rejected claim 21 believing that the phrase "capable of bringing about the expression of" is indefinite because "a DNA molecule that encodes a protein is capable of bringing about the expression of the protein it encodes." (Office Action, page 4, paragraph 2.) Applicants have amended claim 21 to more particularly

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point out and distinctly claim the subject matter Applicants regard as their invention, and therefore request that this rejection be withdrawn.

Additionally, the Office has rejected claims 35 and 36 finding the phrase "antigenic portions of said DNA sequence" as indefinite since it is unclear what is intended by a antigenic DNA sequence. (Office Action, page 4, paragraph 4.) Applicants have amended claims 35 and 36 to more particularly point out and distinctly claim the subject matter Applicants regard as their invention, and therefore request that this rejection be withdrawn.

The Office has rejected claims 35, 36, 37, and 39 under 35 U.S.C. §112, second paragraph finding the phrase "encodes pp28" confusing because these particular restriction fragments encode a portion of, rather than an entire pp28. (Office Action, page 4, paragraph 5.) Applicants have amended claims 35, 36, 37, and 39 to more particularly point out and distinctly claim the subject matter Applicants regard as their invention, and therefore request that this rejection be withdrawn.

In view of the foregoing amendments and remarks, Applicants respectfully request the reconsideration and reexamination of the pending claims and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

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Respectfully submitted,

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APPENDIX TO AMENDMENT OF August 24, 2001

Amendments to the Claims

21. (Three Times Amended) A DNA molecule encoding HCMV pp28, or antigenic portions thereof that elicit antibodies that immunologically bind to pp28[, wherein said molecule is capable of bringing about the expression of said HCMV pp28 or said antigenic portions thereof].

35. (Twice Amended) The DNA molecule of claim 25, wherein said DNA molecule is a fragment of the 2.0 kB HindIII/SmaI fragment that includes [antigenic portions of said] DNA [sequence which encodes pp28, or] encoding antigenic portions of pp28 [thereof] that elicit antibodies that immunologically bind to pp28.

36. (Twice Amended) The DNA molecule of claim 25, wherein said DNA molecule is a fragment of the 1.5 kB HindIII/KpnI fragment that includes [antigenic portions of said] DNA [sequence which encodes pp28, or] encoding antigenic portions of pp28 [thereof] that elicit antibodies that immunologically bind to pp28.

37. (Amended) The 0.5 kB KpnI/SmaI fragment encoding [pp28, or] antigenic portions of pp28 [thereof] that elicit antibodies that immunologically bind to pp28, within the HindIII R fragment from the genome of human cytomegalovirus.

39. (Twice Amended) The SmaI/SmaI fragment encoding [HCMV pp28, or] antigenic portions of HCMV pp28 [thereof] that elicit antibodies that immunologically bind to pp28, within, but not including, the HindIII R fragment from the genome of human cytomegalovirus.

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